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see Transylvania J. of Med  
1835. VIII. p. 451. ✓  
AN

## INTRODUCTORY LECTURE,

DELIVERED TO THE

MEDICAL CLASS

OF

TRANSYLVANIA UNIVERSITY,

IN 1835.

GENTLEMEN,

THE medical art, whether we regard the great variety of knowledge necessary to the successful practice of it, or the great value of the object to be attained by it, is unrivalled in value by any thing which relates to this earth alone. But an objection has been made to the study of medicine, which, if well-founded, would so sink its value in my estimation, that I would instantly abjure it forever. The objection is, that it is unfriendly to religion, and calculated to lead those who cultivate it, to infidelity or a disbelief of the Christian religion. It is my purpose to show that this objection is without foundation; and I shall attempt it by showing that it is equally applicable to other branches of knowledge of an elevated character, and to natural religion itself, which those who object to revealed religion, avow to be their religion; and that in itself it is of no force, inasmuch as the knowledge of the wonderful things discovered by the study of nature, (whether we confine ourselves to the human system, or extend our views so as to

embrace the whole range of created things,) leads directly first to natural, and through it to revealed religion: and as this cannot be done to any purpose without your most undivided attention, on account of the nature of the subject, I trust I shall have it, for the very few minutes I shall occupy your time.

The wonderful powers of the human body, whereby it prepares various fluids for its different purposes in the state of health, and puts in operation a train of actions in sickness which often result in its restoration to a sound state, so as for a long series of years to withstand the assaults of the different causes of disease; and, although individuals perish at last, the power it possesses of continuing the race, have led some to regard the whole of the phenomena exhibited, as the result of organization alone; inasmuch as all seems to depend upon this, and they think there is no reason to believe the race will ever cease, and have no knowledge of the time when it began, and can as well believe that it has been without beginning as any other being of a higher order.

It is evident at once, that this puts organization in the place of any superior Being, the maker and fashioner of the body of man; and, therefore, is as much opposed to natural as to revealed religion; to that which is derived from an examination of the works of nature, as to that received by direct revelation from God. For the moment that our investigations lead us to the discovery of a cause sufficient to produce what we observe in ourselves, and behold around us, the inducement to push them farther is taken away, and the very ground of the investigation fails; because, the ground of the argument for the being of a God drawn from the works of nature, being from effects to a cause capable of producing them, we can go no farther if a cause be discovered in the organization alone of material things, capable of producing the effects we see.

But a similar train of reasoning would lead us to the same point, in other branches of knowledge of an elevated character. We behold around us innumerable bodies of a vast size, so distant from this world that notwithstanding all our discov-

eries in the construction of instruments of the greatest power of magnifying, their visible diameter is not perceptibly increased;—so numerous that every improvement in the instruments used brings new myriads into view, and so brilliant that the flashing of their light is beheld with admiration extending itself even to the inhabitants of Earth. We behold a number of shining planets revolving together with our world around the glorious sun, as well as turning each upon its own axis, every one attended by one or more secondary planets, revolving not only on their own axes, but around the primary planets, and with them periodically making the circuit of the sun. We see, too, at long intervals, rapidly moving brilliant bodies, which, so far from being erratic or wandering, as they are often termed, make a periodical return to the same quarter of the universe, with surprising exactness. All these complex motions of great bodies around themselves and one another and the sun, are performed with such exactness, that calculations are made with certainty, as to the minute in which one will pass between two others, so as to shut the more distant one from the light of the sun, in part or in whole; and to what rock perhaps in a vast ocean we must sail to behold the spectacle of the passage of Venus across the disk of the sun, commencing at a particular moment of time. They are performed with such exactness as to preserve precisely the same position in the universe in relation to the innumerable brilliant globes situated in the infinity of space around us, so that for ages they have appeared to be immovably fixed in the heavens; not varying from their apparent position as much as the breadth of a fine wire stretched across the field of observation of an instrument, once in 250,000 observations. And this has been going on for ages; nor can we possibly tell how many ages it is yet to continue to fill the mind of the human race with wonder and astonishment at the magnificence and sublimity of the phenomena continually presented to us.

The most eminent astronomers undertake, however, to explain all these motions, and to lay down the laws by which they are regulated, and to show that a certain power or influence

exerted by each over the others, operating according to known rules, is the cause of all. This power then comes in, as satisfactorily at least as the organization of the human body, to account for the phenomena observed, and to do away the necessity of looking to any superior power as the originator of them. The very certainty with which, after long periods, exceeding in some cases the life of man, these heavenly bodies are found to reoccupy the same relative position, is proof, at least, that the power regulating their motions is more durable than that which regulates the motions of the human body, and is moreover ready again to carry them through the same circuit, with undiminished ability to accomplish it with certainty.

Astronomy, therefore, leads to the subversion of religion, at least as surely as medicine.

It would be a waste of time to go through this argument with regard to other branches of natural knowledge. In all of them we discover laws which, to those who will maintain that they have ever been, and will ever be, must of course be in the place of Him who established them. By pursuing such a train of thought, and overlooking its defects as an argument, no doubt a man may be led to infidelity; but it will lead him as certainly to atheism also; and not to either more surely in medicine than in any other branch of natural knowledge. But so far from this being the result of a correct inquiry into these subjects, the reverse is true, as we shall endeavour to make manifest, by showing that the knowledge of the wonderful things discovered in the study of nature, (whether we confine our attention to the human system, or extend our views so as to embrace the whole range of things visible and invisible,) leads directly first to natural, and through it to revealed religion.

If we extend our views to the whole range of natural things, there are many sources from which we may derive proofs of the existence of God, who is the object of religion, natural and revealed, and without whom religion would, therefore, be without meaning. One of the most obvious is the existence of marks of design, and of the perfect fitness of

every contrivance to effect the object intended, in every thing around us; not only in all living things, whether animals or vegetables, but even in things inanimate. As to things inanimate, the wonderful regularity of the motions of the heavenly bodies, the sun, the moon and the stars; the uniformity with which the heat and light of the sun are distributed to every part of the earth, giving to all regular returns of seed-time and harvest, of summer and winter, of day and night; and the wonderful simplicity of the means by which such great effects are uniformly and regularly accomplished, so that there is no disappointment of expectation, but the sun rises at the precise instant we look for him, and the spring opens and the fruitful season returns at the appointed time, and man's food is replenished from the teeming earth—are all striking instances of deep design and wonderful contrivance.

In regard to living things, the whole structure of every animal is so completely adapted to its mode of life, that it cannot be doubted that it was designed to enable him to effect certain objects necessary to his welfare and comfort. The human body, the particular object of your attention as students of medicine, is so wonderfully contrived as to have excited for ages the admiration of all who have studied it attentively. The fore-arm, the wrist and the hand, taken together, constitute an apparatus so wonderfully adapted to effect a great variety of motions, that no one can examine it without allowing that the whole was designed to enable man to use those parts for an infinite variety of purposes. It would be easy to multiply evidence of this sort. The manner in which the brain is enabled to convey its influence to distant parts, and we become sensible of impressions made on them; in which the eye is enabled to receive the rays of light reflected by external objects, in just such measure as is suited to its present condition and with its different humors and its fluid lens, to paint upon the fair white expansion, in its darkened chamber, the most perfect picture of the objects around it; in which the ear is contrived to receive the vibrations in the atmospheric air and to convey them inwardly, and make such an impression on the

internal organs of hearing, that we become sensible of the most minute variations of sound, so that we can distinguish that which is peculiar to every beast, bird and insect we have become acquainted with, and even that which is peculiar to individuals—all these are instances of wonderful adaptation of structure to effect various and important objects. And when we turn our attention to the mode of the continuance or succession of every race of animals, and of every kind of plants, how can we hesitate to believe there is design in them all? There is so settled an order in these things, that we feel confident when we look at a plant just peeping out of the ground, that it proceeds from a seed or a bud in the earth, and that in due time, it will acquire maturity, and produce similar seeds or buds. The same is repeated year by year; and these things prove a fitness to effect the continuance of the series of animals and vegetables, which must necessarily be the result of design. It must be so accidentally or designedly. Accident never could produce a regular, invariable result. Design, therefore, is evident in the whole. Design leads us directly to an intelligent contriver, with powers corresponding to the magnitude and the infinite variety of the work, and with dispositions corresponding to the manner in which all is made to contribute to the comfort and happiness of animate beings. And him we call God.

This argument is so simple, yet so forcible, as not to be controverted. It carries conviction to the mind of the most uneducated, if put into a shape that he can comprehend. No such man could be made to believe, if he were to find an instrument of iron, or brass, or stone, however rude the shape, that it was not fashioned by some one who had an object in view, a purpose to answer, even though he could not exactly tell what that was. But if he discovered that it was adapted to cutting, to splitting, to driving, he would immediately in addition to his former conviction, say what it was made for. There is no escape from this argument. But one is attempted in the way above stated; viz. by attributing every thing observed to the organization of the animal, and by assuming that

that is perpetual and from eternity. But who can believe that thought, the affections and passions we feel, the reason we exercise, all is the effect of organization? We can easily conceive that organization can elaborate the fluids, even the aerial and invisible ones of the body, but it is unconscious of the action. The hand writes, but knows not what it is doing: the heart beats, but is unconscious that it is working for life, its own as well as that of every other part of the body: the brain sends forth its influence, and gives to the hand power to move, and to the heart to beat, and to the senses to receive impressions; but is not conscious of issuing the nervous influence which is the immediate instrument of all this. Meantime, the being which resides in this mortal frame, is conscious of its existence; feels where it sits enthroned; knows (by proper investigation) by what means the brain influences the whole; wills when it shall issue; determines when it shall not; looks abroad to kindred beings; has intercourse with them by means of signs or sounds mutually agreed upon; feels various affections for other beings inhabiting similar frames; often surrenders its own inclinations to gratify theirs; throws itself into imminent peril in their defence, and scorns, in the attempt to save them, to be influenced by a regard for the threatened destruction of the body it inhabits, looking down with composure upon the swiftly approaching dissolution of its frame, but looking up to an after existence, with a longing after immortality as insatiable as any other desire manifested through life, and proving the reality of its existence independent of the body, even upon the very theory in question. For, if the desires we feel are the result of our organization, as every desire connected with the organization of the body has a real object, this must have, the object of which is existence after the dissolution of the body.

But after all, the argument is true, for the being of God, and the objection nothing, even if the whole depend on organization, unless the human race have been from eternity. For if it had a beginning, it must have had a cause to begin it. This point, (independently of any reference to history, which, all

the world over, refers the origin of the race to one or to a very few pairs created to fill the earth,) rests on such ground that few words will be necessary to establish it.

The human race consists of a series of beings proceeding in regular succession from those who lived before them. Every individual of this series had a beginning. Therefore all had: and if all had, the whole race had. Consequently, the organization spoken of in the argument had a beginning, and there must have been in existence previous to it, a being capable of producing it.

The same is true of every other race of animals, and even of trees and every vegetable production—of every organized living thing. Beasts, birds, reptiles, insects, have an organization as complete for the purposes of the animal as man has. This organization, according to the same doctrine, is the cause of all. But the same defect lies at the bottom of this. It is false, if any race, of the most insignificant insect, had a beginning. It is true only, if every such reptile or insect race has been from eternity. If it had a beginning, it had a beginner. And as every individual of every race had a beginning, the whole had, and the organization had, and there must have been a being previously existing capable of originating all we see.

But it is objected that this being also must have had a beginning. The answer is, It does not follow of course that he must have had. The commencement of the human race is not taken for granted, not assumed to be a matter of course. The argument against its existence from eternity is from our knowledge that every one had a beginning, to the inevitable consequence, that the whole race had. But, independently of revelation, we know nothing of the nature of the Being that made all things, but from his works, and there is nothing in them to show he had. Nor has he who argues for the eternity of man, a right to object to the eternity of God. If he, moreover, had a beginning, there must have been one before him to give him a beginning. But there is no need of another. When we are forced to admit the necessity of the existence of a Being

capable of producing all things, we are led at one step to a Being inconceivably great in power, unlimited in wisdom, unbounded in benevolence. We can go no further. To suppose that another created him, is to add to the difficulty; and every step leads to a greater, and we gain nothing; but fall into the absurdity growing out of a series of Gods, each of which must have had a beginning, or there can be no series; and if each had, all had. No one of a series of beings, therefore, can be the originator of all things; and there must be one independent of any series, to be the beginning of all things, who was himself without a beginning. For if he had, when he began to be, he was the sole being in existence; and if brought into being, he was self-created, because there was no other to create him. This could not be, because he could not act before he existed. He was therefore not created, and consequently always was in existence.

But it is replied, this is inconceivable and impossible. As to the impossibility, it lies the other way. It is impossible that the origin and cause of all things could have had a beginning, because he could not give it to himself, and there was no other to do it, and therefore he was without beginning. As to its being inconceivable, that is no argument against its truth. Many things are true that are inconceivable. A mathematician can describe two lines, which he will convince you, if you give your mind to the subject, will forever approach one another but never meet. But not to spend time in stating instances which might be mentioned in every department of science, it is as easy to conceive of the existence of God without beginning, as it is to conceive of a series of animals or trees which had none. The difficulty lies in our being unable to comprehend the idea of a being infinite in duration, so that although we are driven to the conclusion, take what course we may, of the eternal existence of something, either of the creation or the Creator, we stagger at it. But it is more difficult to conceive, that all things should come into existence without a Being capable of commencing them, than it is to conceive that such a Being should be without commencement.

The former is a clear and manifest impossibility, and therefore inconceivable. But the latter is so far from being impossible, that, on the contrary, it is impossible that any other than a Being which had no beginning, could have originated all things. For that which originated all things, must have been without a cause, and therefore did not come into being, but must have been from eternity. We cannot, therefore, conceive that that Being who produced all things, had a beginning. In truth, it is more difficult to conceive of the beginning of such a Being, than to conceive of his being without beginning. And when we make the effort, we find there is no period of duration to which we can urge back our thoughts, and conceive of him as not existing. It is like the idea of duration. We cannot divest ourselves of the idea of the continuance of duration; we cannot conceive of a period when it began. So we cannot divest ourselves of the idea of the existence of a cause of all things; we cannot conceive of a period when he began to be. God, therefore, is, and ever was, as unlimited in being as in wisdom, power, and benevolence. He is, therefore, to be regarded with profound reverence, as well as with gratitude for the manifest attention he has shown to the promotion of our happiness, in an abundant supply of the objects of our wants and of our enjoyments; and the manifestation of this reverence and gratitude by suitable words and actions, is what may be called the religion of nature; and to this it is apparent that we are led by the study of the works of nature, whether we look abroad to every thing around us, or turn our attention to the wonders that exist within us. The study of medicine is not therefore liable to the objection raised against it, but so far from it, it leads, at least, to natural religion. Nor does it stop here: natural leads the mind of man to the necessity of revealed religion, and therefore to a readiness to receive it, if presented with proper and satisfactory testimony of the truth of the revelation.

Natural religion, it has been said, leads us to reverence and to be grateful to the Divine Being. And who can reverence him without desiring to know more of him? And who can

discover to us more of his nature than he himself? Who can be grateful to him and not wish to show his gratitude? And who but himself can inform us as to the mode in which we can approach him in an acceptable manner? Who is it that can doubt that He who made man with such powers as to discover his wisdom and to reverence it, and such feelings as to be grateful for his attention to his wants, must have had views with regard to man, which his limited faculties never could discover; must have intended that each should enjoy life, so as not to interfere with the enjoyments of others; and, therefore, that man should be regulated in his pursuit of happiness by a due regard to that of his fellows? How can it be believed, that God who rules over all, and whose benevolence towards all his creatures, even the meanest in our estimation, is continually before our eyes, can be satisfied with our conduct in so frequently interfering with his benevolent designs by our selfish schemes of aggrandizement, by our corrupt practices in secret, and by our open outrages? And who can suppose that he will be dissatisfied and not attempt to restrain such things; and how restrain them but by laws to prevent them, and how shall they operate unless he inform his intelligent creatures as to what he requires of them? How wise the conclusion, then, of that wisest of the Heathen philosophers, Socrates, that God would certainly reveal his will to man, that man might know how to govern himself with regard to God and his fellow-man? How perfectly consistent is it therefore with reason, led on by an investigation of the works of nature, to believe in God; and by a consideration of the absolute need of restraint of the unruly will of man, in order that the benevolent designs of his Creator may not be thereby marred, to believe that God would reveal his will to man?

The study of nature in general, therefore, and of medicine in particular, leads to the expectation of a revelation from God. Nay, more, when we are led thus far, (although evil propensities and the desire to indulge them, are in opposition to it,) reason would lead us, when we perceive in ourselves such a propensity to do what we cannot approve of, and are

conscious of so many actions that we condemn, and must therefore, believe God will condemn—reason would lead us, in these circumstances, to desire that he would reveal his will in regard to the limits within which we must keep in the pursuit of enjoyment, the consequences of failing to do so, and whether there be any mode of satisfying the divine displeasure when we have through the force of temptation fallen into violations of our duty to him. It is evident, therefore, that the desire to have a revelation of the will of God, is the reasonable result of the study of nature and of ourselves in particular. The study of medicine, therefore, is not justly chargeable with liability to lead us to infidelity; but, on the contrary, there are so many wonderful things presented to the mind conversant with the different branches of medicine, which lead to the belief in a wise, powerful, and benevolent God, that that study may safely be recommended to the student of an honest and good heart, as likely to conduct him to belief in God, and to a readiness to receive a revelation of his will.

I go not into the testimony supporting that system which professes to be such a revalation, because it does not come within the scope of my present purpose; which was, not to prove that God has revealed his will, but to show that the study of medicine has no tendency to incline men to reject it, if made. That which claims to be so, must stand on the testimony which is offered in support of it. But I cannot for a moment leave in question with any here present, whether I wave the subject on this account, or through a doubt of its truth. I, therefore, unhesitatingly say, not only that I am perfectly convinced of the truth of the Christian revelation, from a close and patient examination of its claims on the testimony presented; but that I believe that better testimony could not be offered, could not be devised in support of it, and that no man is left unconvinced, who has given the subject a thorough investigation, unless he is kept from it by a state of mind the most deplorable we can conceive, a state of enmity against the God that made him, and the Saviour who redeemed him, leading him to refuse to come to the light because his deeds are evil.